

## PATENT ABSTRACTS OF JAPAN

(11)Publication number : 55-060539

(43)Date of publication of application : 07.05.1980

(51)Int.Cl.

C08L 9/06  
C08K 5/03  
C08L 23/22  
// (C08L 9/06  
C08L 21/00  
C08L 61/16 )  
(C08L 9/06  
C08L 21/00  
C08L 57/02 )

(21)Application number : 53-132181

(71)Applicant : BRIDGESTONE CORP

(22)Date of filing : 27.10.1978

(72)Inventor : TAKIGUCHI EIJI  
KUSAKABE NOBORU  
IKEDA NOBUTADA

## (54) IMPROVED RUBBER COMPOSITION FOR TREAD

## (57)Abstract:

PURPOSE: The title composition having improved holding power of wet roads, and low-temperature and abrasion resistance, comprising a mixture of low- and medium- molecular motion rubbers, carbon black, and a resin softener.

CONSTITUTION: A vulcanized rubber composition comprising (A) 100 parts of a mixture of (a) 95W50 parts by wt. of a low-molecular motion rubber, e.g. butadiene-styrene copolymer with a styrene content of  $\geq 30\text{wt}\%$  of butyl rubber, and (b) 5W50 parts by wt. of a medium-molecular motion rubber, e.g. styrene-butadiene rubber with a styrene content of 18W28wt% or natural rubber, (B) 0.5W20 parts by wt. of a resin softener, e.g. a terpene phenol resin, and/or aromatic hydrocarbon resin, (C) 40W100 parts by wt. of carbon black, and (D) 0W60 parts by wt. of an aromatic process oil having a viscosity-specific gravity constant  $\geq 0.84$ . The composition has a Ts of 350W600 $\mu\text{s}$  measured by the pulse NMR method at the frequency of 50Hz and a dynamic strain of 0.15%, a loss tangent ( $\tan \delta$ ) of 0.2W0.5 at 20° C and 0.4W0.6 at -20° C.

## LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the  
examiner's decision of rejection or application converted  
registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of  
rejection]

[Date of requesting appeal against examiner's decision of  
rejection]

[Date of extinction of right]

Copyright (C); 1998,2003 Japan Patent Office